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Dinamika Protsessa Sgoraniya i Vliyaniye ego na Moshnost j Ekonomichnost' Dvigatelya, by Prof V. I. Soroko-Novitskiv. State Sci-Tach Publ of Machine-Construction Lit, 175 pp. 1946.

50X1-HUM

A REPORT ON THE BOOK "THE DYNAMICS OF COMBUSTION AND I'TS INFLUENCE UPON THE POWER AND ECONOMY OF MOTORS" BY PROF. V. I. SOROKO-NOVITSKIY

A theoretical study of the combustion process in a motor with 'forced' ignition from the physicochemical point of view of the phenomena, is presented in this small volume. Equations are derived which permit one to obtain, by calculation, the data concerning the influence upon the motor's operation of the composition of the working mixture, fuel properties, and the addition of fuels difficult to detonate, etc.

In a series of cases, a method is given for the approximate solution of practical problems (influence of the motor's dimensions upon the most profitable compression ratio, the relation between the octane number of the fuel and the geometrical dimensions of the cylinder). In conclusion, the roles of fuel and the conditions governing combustion are explained in their relation to the wear and tear on motors.

This book is designed for the engineering-technical personnel of the automotive industry, but it can also be used as a school text in higher technical schools that teach automotive science.

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